United States Department of Agriculture | **Forest Service** | **Midewin National Tallgrass Prairie** | **3007 South State Route 53 Wilmington, IL 60481 (815) 423-6370**

File Code: 1950-1 **Date:** December 7, 2001
Route To:

Subject: Middle Grant Creek Restoration

To: Friends and Partners of Midewin

The Forest Service at Midewin National Tallgrass Prairie (Midewin) is proposing to conduct restoration work on a portion of Grant Creek and immediately surrounding lands in the middle part of its watershed and the upper portion of the outwash plains. This project would continue ongoing restoration of the tallgrass prairie ecosystem at Midewin. During this initial public comment period, we are providing you with information on the proposed middle Grant Creek restoration work and invite you to send us your comments.

The proposed project area is located within the western portion of Midewin in Section 2, T.33 N., R.9 E., Will County, Illinois, and includes over one mile of Grant Creek and a large section of a bunker field. Two stream channels are included within the scope of this proposal: the existing channel of Grant Creek running parallel to Blodgett Road near the northern project area boundary, and a secondary drainage with an excavated channel that winds through the middle of the project area. Nine lines of obsolete roads, rail beds, and bunkers that were all once part of the former Joliet Army Ammunition Plant are within the proposed project area. The tract under consideration, having little relief, lies just south of the Deer Run Industrial Park and is located west of State Highway 53. Please see the attached map for site location information.

Available information indicates that prior to agriculture and arsenal development, most of the site's natural landscape was dominated by mesic to wet prairie and sedge meadows, with limited acres of oak savanna. Sometime during the onset of agricultural activities between 1830 and 1940, this area was drained and attempts were made to convert the land to agricultural uses.

At present, the vegetation in the project area is mostly a mix of grasslands dominated by non-native, cool-season grasses, and wetlands dominated by native and non-native vegetation. There are also scattered thickets of woody vegetation, mostly dominated by invasive species (both native and non-native) such as Osage orange, autumn olive, Amur honeysuckle, red hawthorn, green ash, and eastern cottonwood. The wooded areas associated with Grant Creek include a great deal of successional vegetation.

Different reaches of Grant Creek within the project area have been channelized, resulting in an entrenched channel that restricts the stream flow. This deepened channel is now disconnected from the surrounding floodplain, which had previously supported wetlands. As a result, floodwaters are presently confined to the channel, aggravating the severity of stream bank erosion and reducing water availability on the floodplain. Hydrological connections also once existed between the proposed middle Grant Creek project area and the former TNT manufacturing area of the arsenal to the north, today under development as the Deer Run Industrial Park. The storm water and drainage system for the Deer Run site has been

reconfigured, and watershed alterations have occurred as the result of the obliteration of a former channel of Grant Creek, previously functioning as an overflow channel. The percentage of stream flow that is routed through the main channel during flood conditions is expected to increase as a result. Additionally, runoff from the Deer Run site will discharge into Grant Creek from construction of storm water detention ponds at the industrial park.

The **Purpose and Need**, or rationale, for the middle Grant Creek restoration project is to restore hydrological and ecological connections across the landscape, so that hydrological functions, topography, soils, vegetation, and habitat more closely approximate the pre-development conditions, to the extent possible. Restoration of the middle Grant Creek project area will facilitate our goal to restore the tallgrass prairie ecosystem at Midewin in order to conserve and enhance native populations of fish, wildlife, and plants in accordance with the Illinois Land and Conservation Act of 1996. Obsolete roads, rail beds, several of the bunkers, and other Army infrastructure on the floodplain limit the storage and movement of floodwaters, and their removal is expected to improve floodplain and habitat conditions. The boundary between Midewin and U.S. Army-managed land is Grant Creek, and because the northern length of Grant Creek within the proposed project area is currently under Army management, the Forest Service and Army will cooperate to comply with National Environmental Policy Act direction. The Forest Service will be the lead agency for this project.

Based on the planning and implementation of similar restoration efforts, we anticipate that **Issues and Concerns** will include potential adverse impacts to adjacent private lands as the result of changes to the hydrology within the project area. There may be concern that nearby remnants of native vegetation will be adversely impacted. These preliminary issues, and others expressed during this public scoping process, will be addressed in the Environmental Assessment (EA):

- Engineering designs should not promote adverse impacts to connected lands by changes to the hydrology in the project area. Included are adjacent Army lands.
- A stable, high quality stream and riparian area should be created along Grant Creek.
- Protect existing aquatic resources; consider breeding populations of amphibians.
- Impacts on existing wetlands and remnants of native vegetation need to be considered and avoided. Remnants of existing native prairie vegetation should be protected.
- Adverse impacts on federally endangered and threatened species, state endangered and threatened species, and Regional Forester sensitive species need to be avoided. Adverse impacts on existing bird populations need to be avoided.
- Heritage resources within or adjacent to the proposed project area need to be protected.
- Project actions should not affect or preclude identification of future recreational opportunities. Project actions should not adversely impact scenic quality.

Proposed Action goals within the middle Grant Creek project area are: 1) to implement integrated watershed restoration to restore and optimize hydrological, aquatic, and soil conditions for ecological values, 2) to restore habitat and ecosystems, and 3) to improve scenic integrity. The following project actions are proposed:

- Improve or reconfigure Grant Creek and the secondary drainage to optimize hydrological interactions between Grant Creek, its floodplain, and associated wetlands. Stabilize stream banks with appropriate native plant species. Fill or block unneeded drainage ditches. Survey for drain tiles and remove if any are located (excavate and remove, or disable by breaking sections of the tile lines). Obliterate and regrade or rehabilitate roads, rail beds, and culverts within the bunker field; remove ballast (gravel fill material) from abandoned rail beds. Remove bunkers within floodplain or wetland areas. Revegetate with appropriate native plants.

- Implement an Integrated Pest Management (IPM) approach to control exotic (non-native) grasses and herbaceous cover. Methods may include mechanical treatments (i.e. mowing and disking), prescribed fire, competition from native plants, and herbicide applications. Herbicide treatment will consist of spot foliar spraying of approved herbicides with backpack sprayers or small vehicle-mounted sprayers. Herbicides commonly used in natural areas management to control invasive species and noxious weeds include glyphosate, triclopyr, clopyralid, pelargonic acid, and sethoxydim. Spot treatment of new infestations during and following the restoration work may be necessary.

- Cut woody vegetation with hand tools (e.g. chainsaws) and remove (e.g. chipping and removal or burning). Remove undesired understory components of the Grant Creek riparian corridor woodlands, including non-native shrubs and trees. Treat cut stumps with an herbicide approved for this purpose, such as glyphosate or triclopyr, to prevent re-sprouting. Both of these herbicides are commonly used in natural areas management to control woody plants from re-sprouting after cutting.

- Monitor areas to determine results of management (herbicide application, prescribed burning, etc.) prior to enhancement of native vegetation remnants. Plant appropriate native species to restore wetland, prairie, and savanna. The timing, types, and amounts of plant materials (seeds, plugs, transplants) will be limited by availability. Further over-seeding and planting will be used to enhance restoration during the following 3 to 5 years. Protect and enhance existing native vegetation remnants.

- Utilize prescribed burning, mowing, and possibly grazing after the initial invasive species control actions to manage the restored prairie, wetland, and savanna.

The Midewin Land and Resource Management Plan is in the final stages of development, and restoration objectives are contained in all action alternatives developed for the Plan. Standards and Guidelines in the Plan include the use of the management tools identified above as appropriate means to restore tallgrass prairie habitat at Midewin. A program of long-term monitoring of restoration results will be implemented in order to assure the success of actions to protect and improve the restored communities at Midewin.

With this letter, we are initiating the procedures required of the Forest Service by the National Environmental Policy Act. We will complete an Environmental Assessment for the proposed

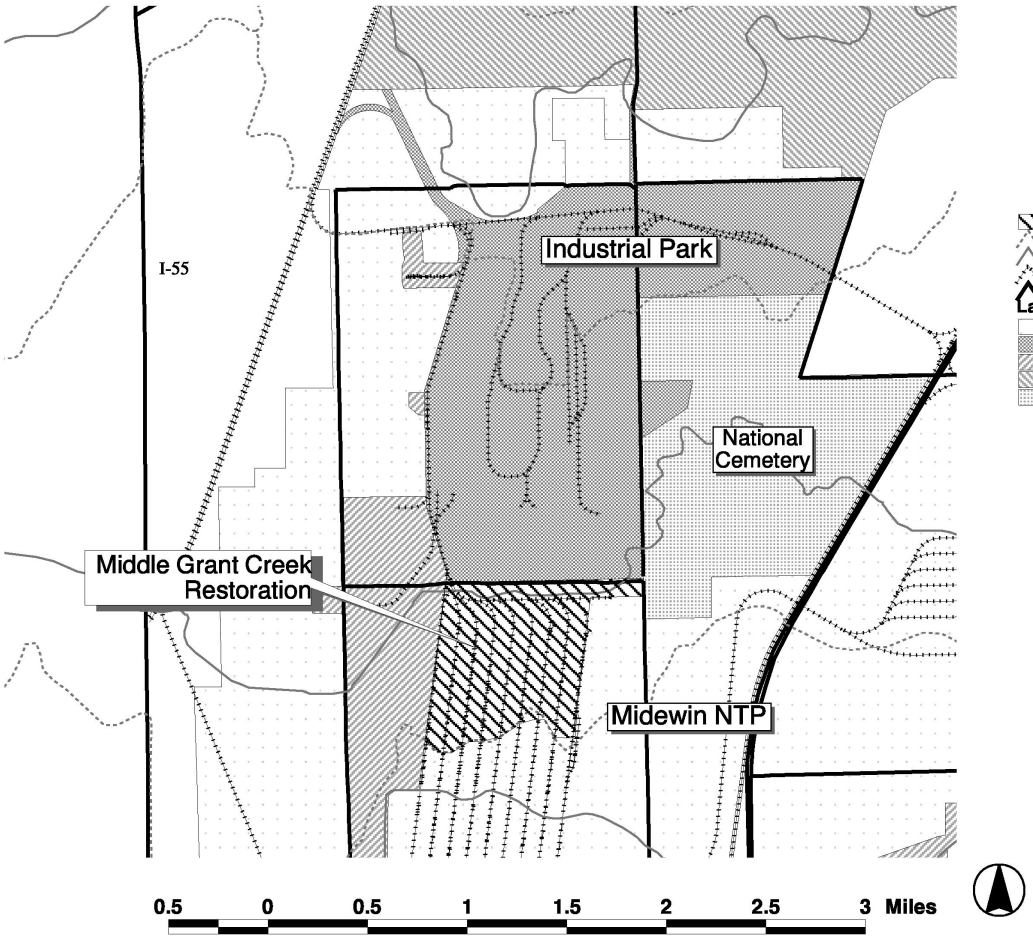
activities during the next few months. You have been contacted as part of the public involvement process. Your comments on the proposed action will help complete the EA. Please consider the following questions and respond to any or all of them in writing by January 7, 2002.

1. Is there any information about the project area (Midewin) that you believe is important in the context of the proposed activities and which the Forest Service might have overlooked?
2. For you or the group you represent, what are the potential effects of this proposal about which you are particularly concerned?
3. Are there reasonable alternative ways to meet the Purpose and Need (the rationale for conducting activities) for which you would like the Forest Service to develop and analyze the environmental effects?
4. Are there issues and concerns? in addition to the ones listed above, which you believe are important and would like to have addressed in the EA? If so, please include your rationale for why they should be analyzed.

We will review and consider comments received during this public input period. We will then develop and analyze alternatives to this proposal, and analyze other environmental effects. We will also analyze a "No Action" alternative as required by NEPA regulations. As the Prairie Supervisor, I will be the deciding official for this project. At this time, I do not believe that the proposed activities will have a significant impact on the environment based on similar activities conducted in the past. However, we will analyze the proposed activities' effects on the biological, cultural, and socio-economic environment, including water, air, soil, sensitive species, federally threatened and endangered species, hazardous materials, recreation, and heritage resources, in order to make a final determination. You will have an opportunity to review and comment on the analysis we conduct when I release the Environmental Assessment. My final decision, issued after comments have been reviewed and addressed, will be administratively appealable under 36 CFR Part 215.

If you have any questions about the proposed activities or the Purpose and Need, please feel free to contact Enid Erickson, Midewin Environmental Coordinator, at the address above, by email at eerickson@fs.fed.us, or by phone at (815) 423-6370. Please submit your written comments by January 7, 2002 to Enid Erickson at the address above. Thank you for your interest in activities at the Midewin National Tallgrass Prairie.

FRANK KOENIG
Prairie Supervisor, Midewin
National Tallgrass Prairie



Midewin National Tallgrass Prairie

Middle Grant Creek Restoration Project Location

LEGEND

- Middle Grant Creek Restoration
- Watershed
- Stream
- Railbed
- Road

Land Ownership

- Midewin NTP
- Industrial Park
- Army Inholdings
- Army Training Area
- National Cemetery